

# Problem Drinking among College Students: A Review of Recent Research

ALAN D. BERKOWITZ, Ph.D., and H. WESLEY PERKINS, Ph.D.

---

---

Research examining collegiate problem drinking from 1975–1985 is reviewed. Eight topics are distinguished pertaining to the definition and correlates of problem drinking: consumption patterns; self-identification as a problem drinker; motivations; negative consequences; personality characteristics; family, peers, and environment; long-term consequences of problem alcohol use; and male-female differences in problem drinking. Reported prevalences of problem drinking range from a low of 6% to a high of 72%, with most studies suggesting that approximately 20–25% of students have drinking problems. This variability may be explained in large part by divergent conceptual and operational definitions of problem drinkers across studies. Problem drinkers are characterized relative to nonproblem drinkers as impulsive, prone to deviant behavior, less oriented towards academic success, more independence-seeking, and more likely to drink for escapist (rather than sociability) reasons. The influential role of college peers in the development of alcohol abuse patterns is significant and increases, relative to family influences, with age. Collegiate problem drinking is associated with difficulties with friends and teachers and in meeting responsibilities, although it has not been established as a cause of alcoholism or later-life drinking problems. While the incidence of problem drinking is higher among men, overall motivational, personality, and environmental influences appear similar for problem drinkers of both sexes. Differences between male and female problem drinkers tend to reflect gender-related patterns of drinking found in society at large. Implications of the literature for the design and implementation of college alcohol education programs are discussed.

---

---

## INTRODUCTION

A growing literature has attempted to define problem drinking among collegiate populations, document its fre-

quency, and identify the long-term consequences of negative drinking patterns developed in college. Yet the majority of studies employ divergent theoretical and operational definitions to assess alcohol abuse and may investigate selected aspects of drinking behavior independent of overall patterns of consumption, negative consequences, and drinking motivations. As a result, the reported prevalence of students abusing alcohol varies widely, ranging from such extremes as 6%<sup>1</sup> to 72%<sup>2</sup>

The lack of comparability among studies may create difficulties for health practitioners who utilize the research literature as a guide in identifying and treating alcohol-abusing clients and in assessing the extent of the problem in a particular college population. Furthermore, since relatively few alcohol abusers may define themselves as having a problem when being treated for other problems in campus health and counseling centers, awareness of problem drinking symptoms is important.

Considerable research on alcohol-use patterns has been conducted among college populations. Since the mid-1960s, studies have reported at least occasional alcohol use for over 90% of college students.<sup>3–5</sup> Indeed, alcohol use has long been a part of the college social scene,<sup>6,7</sup> and it is not surprising that students of both sexes increase their alcohol consumption after arriving at college.<sup>8,9</sup>

Large-scale regional and national studies have reported consumption rates for the majority of student alcohol users ranging from 1 to 10 drinking occasions per month and one to five drinks per occasion.<sup>5–10</sup> In these studies, the modal drinker used alcohol a few times a week and consumed two to four drinks per occasion, with men tending to drink greater quantities but not necessarily more often.

Motivations for student alcohol use may include drinking to enhance sociability or social interaction, to escape negative emotions or to release otherwise unacceptable ones, or simply to get drunk. Sociability rea-

---

Alan D. Berkowitz is a clinical psychologist and H. Wesley Perkins is an associate professor of sociology at Hobart and William Smith Colleges.

sons are the most common, with more men than women also drinking for escapist reasons.<sup>11</sup>

Negative consequences from drinking may commonly include fights or interpersonal altercations, property damage, negative effects on academic performance, damaged relationships, or trouble with authorities. In Engs' 1977 nationally representative study of 13 campuses, 51% of those surveyed experienced between one and four problems relating to alcohol use in the previous year. Only 20% of students who drank reported no problems resulting from their alcohol use, with men reporting more drinking-related negative consequences than women.<sup>10</sup>

Thus, in general, the literature suggests that most students drink for primarily social purposes on at least a weekly basis and experience occasional negative consequences from alcohol use. Yet despite trends toward convergence in some areas of men's and women's alcohol use, significant gender differences persist in most aspects of drinking.<sup>8</sup> These differences need to be considered when evaluating alcohol abuse among men and women.

Patterns of normative alcohol use as described above may be compared with patterns among problem drinkers as defined by the different criteria reviewed below. In order to provide a composite profile of student alcohol abusers focused on recent research that takes into consideration alcohol consumption patterns, motivations for and consequences of drinking, and distinctive personality and family background characteristics, the literature from 1975–1985 on collegiate problem drinking is reviewed and synthesized here. Differences among male and female problem drinkers and the possible implications of college alcohol abuse for alcoholism in later life are reviewed as well.

## DEFINITIONS OF PROBLEM DRINKING

Individual studies have employed divergent definitions and methodologies in defining problem drinking. These definitions have incorporated criteria based on the quantity and frequency of alcohol use, drunkenness and other drinking-related negative consequences, willingness to identify oneself as having a drinking problem, and drinking for various escapist reasons or to get drunk.<sup>12</sup> Thus, the following discussion is organized into sections according to the particular definition of problem drinking that was examined in particular studies.

### Excessive Consumption and Intoxication

It is unlikely that people who drink both infrequently and in small quantities will have alcohol-use problems. Thus, one research strategy has been to identify "heavy" drinkers as defined by high frequency and quantity consumption patterns and to examine the particular characteristics of this group. Blane presented data suggesting that "frequent heavy drinking," defined as consumption of five or more drinks at one occasion at least

weekly, is a phenomenon prevalent among young adults that has serious individual and societal consequences.<sup>13</sup>

Wechsler and McFadden reported on consumption patterns among more than 7,000 New England college students from 34 institutions of higher education.<sup>5</sup> In that study, 29% of the men and 11% of the women met Blane's<sup>13</sup> criteria for frequent heavy drinking. Frequent heavy drinking was correlated with lower academic performance, less attendance at religious services, use of marijuana, and increased negative consequences.

Using the same data, Wechsler and Rohman identified a subsample of frequent heavy drinkers who reported becoming intoxicated weekly or more often.<sup>14</sup> Eight percent of male and 2% of female drinkers met these criteria for "frequent heavy intoxicated" (FHI) drinking. Negative consequences experienced by FHI drinkers as compared with other students were two to five times higher for men and two to nine times greater for women. More than half of the FHI drinkers reported blackouts, engaging in behavior while drinking that they later regretted, going without other things because of the cost of alcohol, and for men, getting into fights or trouble with authorities. Interestingly, while the majority (68%) of FHI drinkers considered themselves "moderate" drinkers, only 5% felt that they might have a drinking problem. Drinking to get drunk, which was selected as a reason for drinking by one-quarter of the women and one-third of the men, was the one item most likely to distinguish the FHIs from the other drinkers. FHI drinkers gave more reasons for their alcohol use than other drinkers. Finally, FHI patterns in college were associated with similar drinking patterns in high school.

### Self-Identified Problem Drinkers

Other researchers have attempted to identify problem drinkers by simply asking students if they have worried at some time about the consequences of their own drinking. Different wording of this definition may have contributed to reported differences in prevalence rates of 1%<sup>15</sup>, 5%<sup>16</sup>, 19%<sup>4</sup>, 30%<sup>17</sup>, and approximately 35%<sup>5</sup> in various student populations.

Seay and Beck reported a discrepancy between self-identification prevalence rates and problem drinking rates obtained using a more objective measure.<sup>15</sup> Thus, while only 1% of the 395 students they surveyed saw themselves as having a drinking problem, 25% were classified as being problem drinkers and another 7% as alcoholic according to the Michigan Alcohol Screening Test (MAST)<sup>18</sup>, a commonly used diagnostic instrument.

In Strange and Schmidt's study, self-identified problem drinkers were more likely to drink for escapist reasons or to get drunk, and they experienced more negative consequences in academic and interpersonal areas.<sup>17</sup>

In summary, these studies suggest that students who worry about their own drinking are similar in many respects to problem drinkers as identified by criteria of

frequent consumption and intoxication. Yet only a small percentage of individuals meeting the latter criteria may be willing to identify themselves as problem drinkers. It is unclear how to account for the fact that relatively few heavy consumers identify themselves as problem drinkers. Since adolescent and young adult consumers often choose friends with similar drinking styles,<sup>19</sup> perhaps frequent heavy drinkers have peer reference groups which reinforce perceptions of their own behavior as normative or moderate. It is also possible that differences in personality as well as family and cultural backgrounds may result in differing self-perceptions in relation to drinking behavior. Finally, those who do identify themselves as problem drinkers may simply be heavy drinkers whose difficulties have become so serious that they are forced to acknowledge that there is a problem. Additional research is needed to determine which of these hypotheses is plausible in explaining reported discrepancies between subjective and objective measures of problem drinking.

### Reasons for Drinking

A number of studies have reported distinctive motivational patterns as characteristic of problem drinkers. Thus, drinking for certain kinds of reasons may itself be used as a definition of problem drinking. Ratliff and Burkhart reviewed literature suggesting that while most students drink to amplify positive affective states, problem drinkers also seek to escape negative ones or to use intoxication as an opportunity to express socially inappropriate behavior.<sup>11</sup> Their own study comparing drinking motivations among heavy and light drinkers of both sexes confirmed previous findings. Heavy drinkers exhibited stronger motivations to drink for both social and escapist reasons. Drinking for the purposes of expressing normally constrained behavior or sensation seeking accounted for 44% of the variance between heavy and light drinkers in their study. In a study by Beck, drinking to get drunk discriminated non-abusers from abusers, who were defined by three criteria: reported drunkenness, driving while intoxicated, and symptoms indicative of alcohol dependence.<sup>20</sup>

Recent research on the correlates of adult drinking has emphasized the ways in which personal expectations and cognitive structure influence alcohol use patterns.<sup>21</sup> Thus, Ratliff and Burkhart explained gender differences in student drinking motivations and consequences in their data by suggesting that men and women have different expectations of what will happen as a result of their alcohol use.<sup>11</sup> They concluded that women drink to enhance social pleasures while men expect to experience a greater degree of aggressive arousal and social deviance as a result of their drinking.

In summary, a wider variety of drinking motivations may characterize problem drinkers, who may also anticipate different effects of their alcohol use, than non-problem drinkers. Drinking to escape negative emo-

tions, to release socially unacceptable ones, or simply to get drunk may be indicative of problem drinking. Among these motivations, drinking to get drunk has been found to be the most important factor distinguishing a problem as defined by other measures of problem drinking. Based on the available research, one might speculate that differences between problem and non-problem drinkers can also be explained by differences in cognitive expectancies regarding alcohol's effects. Thus, in addition to the differences in drinking motivations cited above, it is possible that problem drinkers may hold different expectations regarding the extent to which alcohol use will alter their state of consciousness and normal patterns of behavior.

### Negative Consequences of Drinking

A variety of negative consequences may be experienced by student drinkers including disruptions in personal relationships, problems with authority figures, impaired academic performance, more frequent drunkenness, and, for men, increases in fighting and physical or property damage.<sup>5</sup> Thus, the degree to which negative consequences resulting from alcohol use are experienced may itself be used as a way of defining problem drinking. Increased negative consequences have been found among problem drinkers identified by criteria of heavy consumption<sup>5,10,11</sup> and self-identification<sup>17</sup>, for example. In these studies, males identified as problem drinkers on consumption or self-identification measures reported greater numbers of negative consequences than female problem drinkers.

This pattern of gender differences in negative consequences for problem drinkers parallels the greater incidence of drinking-related negative consequences found in the literature for male drinkers in general. Due to a bias in alcohol survey questionnaires towards the more visible, socially disruptive negative consequences common among men, however, negative consequences rates may be underreported among women. For problem drinkers of both sexes, nonetheless, the incidence of negative consequences is significantly elevated above what is normative for their respective genders.

### CORRELATES OF PROBLEM DRINKING

There are a number of antecedent and environmental factors which may be associated with the various definitions of problem drinking. Thus, personality characteristics as well as peer, family, and environmental contexts may exert some influence on what is called problem drinking.

#### Personality and Problem Drinking

A variety of attitudinal and personality characteristics have been empirically associated with the above definitions of problem drinking, including lowered impulse control, greater proneness to deviant problem behav-

ior, lowered expectations of academic success, and greater value placed on independence than on academic achievement.<sup>22,23</sup> Moos, Moos, and Kulick sampled college students at the beginning and end of their first year and found that the above personality characteristics predicted later increases in alcohol consumption.<sup>23</sup> Similarly, Jessor and Jessor<sup>24</sup> have proposed a theory of "problem proneness" which combines these personality characteristics with environmental and behavioral factors and which has been used to attempt prediction of when particular individuals will develop problem drinking patterns.<sup>22,25</sup> Within this model, alcohol abuse is viewed as a behavioral pattern of problem-prone individuals likely to engage in other forms of deviant behavior as well. Their research is consistent with studies showing increased drug use and other problem behaviors among teenage<sup>26</sup> and college alcohol abusers.<sup>5</sup> Thus, the research on personality points to the importance of nonalcohol specific factors in understanding problem drinking. Furthermore, these factors, termed "commonalities," are thought to underlie other forms of substance abuse as well.<sup>27</sup>

The drinking patterns of potentially problem-prone collegians require attention in future research studies. In particular, possible gender differences in the types of problem behaviors exhibited by men and women need to be explored. For instance, are women who abuse alcohol also likely to engage in other problem behaviors related to eating disorders or shoplifting in contrast with men who may engage in more aggressive behaviors such as fighting or destruction of property?

With regard to gender differences, previous research has pointed to greater psychological disturbance among alcoholic women in comparison with alcoholic men.<sup>28</sup> Reiskin and Wechsler explored this hypothesis by examining the drinking patterns of students who used campus mental health services.<sup>29</sup> In their study, drinking-related negative consequences and heavy consumption were associated with utilization of counseling services for women but not for men. Their finding might be interpreted as supporting a greater association between emotional disturbance and alcohol abuse among women as compared with men, although the sample is unrepresentative and use of a mental health clinic should not automatically be associated with poor mental health. It may instead reflect a greater willingness on the part of women to seek help. In fact, Ratliff and Burkhart, using a sample selected on the basis of heavy consumption patterns, found no indication of greater emotional problems among female heavy drinkers.<sup>11</sup> Their findings and those from other studies of adult women<sup>30</sup> suggest that female problem drinking may not be a unitary phenomenon and that women identified on the basis of psychological disturbance or more serious alcohol use problems may not be representative of other women drinkers.

Finally, since much of the previous research on adult psychopathology and alcoholism has been conducted

with samples identified through treatment agencies, the interpretation of results is problematic, and the findings may not be generalizable to students on today's college campuses, where different sex-role expectations and norms for alcohol use prevail. Another problem stemming from the association of alcoholism with specific personality characteristics is that these characteristics may result from, rather than be a cause of, alcoholism.<sup>31</sup> Practitioners must therefore be careful not to generalize from literature based on older, alcoholic populations when working with students.

### Peer, Family, and Environmental Influences

The research on problem drinking among college-aged populations has focused primarily on questions of prevalence, motivations, and consequences while neglecting larger, social context issues of peers, family, and environment. The authors of two different reviews of research on substance use (using samples based mostly on noncollege populations) concluded that, in general, the influence of social context (peers, family, and environment) among youth has been more powerful than personality correlates in predicting the initiation of and involvement in problem-drinking behavior patterns.<sup>19,32</sup> It may be concluded from our review of the relevant literature that, among social context variables, peer influences have outweighed the effects of family and environment and become stronger in adolescence and young adulthood. In addition, young problem drinkers appear to have weaker ties to parents and are more oriented towards peers, who provide influential models for their heavier alcohol use. Thus, in a recent study of a college population, Perkins demonstrated that the influence of peers upon heavy drinking was far greater than that of other environmental and family characteristics.<sup>33</sup>

Kandel, in her review of drinking and drug behavior among youth, suggested that perceptions of peer use rather than actual peer behavior may account for much of this influence.<sup>19</sup> However, it is unclear to what extent these perceptions of peer drinking behavior are accurate or are based on possible misperceptions. In a recent study exploring this question, a majority of the students surveyed held inaccurate perceptions of the campus alcohol use attitudes. Furthermore, perceptions of peer attitudes toward alcohol use, when examined in relation to personal attitudes toward alcohol use, predicted patterns of drinking.<sup>34</sup>

Family patterns associated with later problem drinking include disturbances in the way affection is expressed, family conflict (usually between parents), inadequate discipline, and lack of adequate parental role models.<sup>32</sup> The lack of positive bonding and parental support in some families may thus account for the greater influence that peers exhibit for children from these families.

Recent research on alcoholic families in particular has demonstrated the children's at-risk status for the

development of alcohol abuse.<sup>35,36</sup> Through marital dissension, economic and emotional instabilities, and interpersonal violence that are common in alcohol-abusing families, the development of a secure and emotionally stable identity is often hampered, which may, in turn, be reflected in a problematic drinking style as the child matures. Moreover, simply through the lack of positive parental role models for drinking and the observation of problematic drinking styles, the child may learn many of the same problem patterns of behavior. Thus the child of an alcoholic may begin exhibiting problem drinking as a teenager or perhaps upon entering the college environment, where academic pressures can be intense and where alcohol use is a predominant feature of social occasions. In research on college students, children of alcohol abusers were more likely to report negative consequences of their alcohol use and were twice as likely to identify themselves as having an alcohol problem.<sup>37,38</sup>

Furthermore, the child's religious tradition and degree of religious commitment—both of which are largely determined by one's family background—have been shown to be associated with heavy consumption and other measures of problem drinking in research among recent cohorts of college students by Wechsler and McFadden<sup>5</sup> and by Perkins.<sup>33,38</sup> More frequent attendance at religious services and greater strength of faith were linked to less problematic drinking, and Jewish students (as compared with Protestants and Catholics) exhibited lower levels of problem alcohol use. It is worth noting here that the pattern of greater problem drinking among students from Catholic and Protestant traditions as compared with students from a Jewish background replicates religious affiliation differences found in research on students of the late 1940s and early 1950s.<sup>7,39,40</sup> Thus alcohol-use socialization within the context of families' differing religious/ethnic traditions appears to be an important and persistent factor affecting differences in Jewish-Gentile problem drinking across generations of collegians.

Although there have been few studies exploring the relationship of social context and problem drinking among college students, there is some evidence suggesting that women's drinking is more influenced by environmental factors than is men's. Ingra and Moos, for example, found that group alcohol-use norms existing within dormitory environments had a greater impact on women's drinking than on men's.<sup>41</sup> Berkowitz and Perkins reviewed studies and reported research of their own suggesting that the increase is greater than the corresponding increase for men.<sup>8</sup> Similar patterns may exist for adult women alcoholics, who appear more sensitive to criticisms of their drinking and whose drinking may be more affected by environmental stressors than that of male alcoholics.<sup>30</sup> This phenomenon may be interpreted stereotypically and simplistically as the result of women being less resilient and weaker than men. In actuality, however, this difference

may point to a greater interpersonal sensitivity and willingness to respond to others among women as compared with their male peers. Further research on the relationship of gender to social context and problem drinking is needed before this phenomenon can be adequately explained.

Thus, the research on social context influences points to the interaction of gender, family, peers, and environment in the development of college drinking and, perhaps, problem drinking. The influence of peer relationships is especially important at a time when students are typically away from their families and experiencing significant life transitions. This topic requires greater attention in future research and in treatment strategies involving college populations.

### LONG-TERM CONSEQUENCES OF PROBLEM ALCOHOL USE

A number of researchers have examined the long-range effects of problem drinking in relationship to alcohol abuse later in life. Two contrasting views in the literature are presented by Zucker & Noll: alcohol abuse is depicted as a continuous (progressively worsening) phenomenon or, alternatively, as a discontinuous phenomenon (i.e., not necessarily associated with later abuse).<sup>32</sup> Support for the continuity model (abuse starting with early problem drinking and gradually developing into alcoholism over time) has been provided from retrospective studies of adult alcoholics. Given that early abuse has not been highly correlated with later problems in general (see below) however, it may be that studies supporting continuity are misleading based upon their utilization of unrepresentative samples derived from clinically identified populations.

Donovan, Jessor, and Jessor, applied problem behavior theory to this topic and found that men and women classified as problem drinkers in college tended to be nonproblem drinkers six years later and that some nonproblem collegiate drinkers reflected problems at the later time period.<sup>25</sup> Discontinuity was greater for women than for men, however; while 80% of female problem drinkers in 1973 were nonproblem drinkers in 1979, only 50% of the men initially identified as problem drinkers became nonproblem drinkers over this time period. At both time points, approximately one-fifth of the sample were problem drinkers, suggesting that different individuals may experience alcohol-abuse problems at different times in the life cycle. Measures that predicted the continuation of earlier problem drinking and the development of problem drinking among high school and college nonproblem drinkers in this study included tolerance of deviance, low religiosity, drug use, friend's perceived approval for problem behavior, measures of involvement in other nondrinking problem behavior, and school performance. Thus, while strong continuity in drinking behavior between both times was not found, there were specific personality and

social context influences that may have provided continuity for some individuals who were problem drinkers at both times.

Another important longitudinal study was conducted by Fillmore et al.,<sup>42</sup> who restudied a subsample of Strauss and Bacon's<sup>7</sup> college alcohol-use study 25 years later. Zucker and Noll, in reviewing their research, noted significant evidence of discontinuity in problem drinking patterns.<sup>32</sup> Overt alcohol problems (such as excessive consumption or negative consequences) were less predictive of later difficulties than was the extent of psychological dependence on alcohol use as a coping mechanism.

While superficially at variance, the discontinuity and continuity views may be compatible. On the one hand, styles of drinking for the majority of students in college may be closely linked to other characteristics of the academic environment and thus may not persist into later life. On the other hand, continuity between early and later problem drinking may occur for a smaller subgroup of alcohol abusers, due to a variety of attitudinal, personality, and family background factors. The concept of the problem-prone individual<sup>24</sup> may possibly describe this latter group of students. The relative emphasis placed on immediate and long-term consequences of problem alcohol use in the counseling of college students may thus require that health practitioners distinguish between these two groups to some extent. Thus, personality and family background characteristics and the extent to which an individual appears psychologically dependent on alcohol use may be helpful indicators in the prediction of later problems.

### SUMMARY AND CONCLUSIONS

#### Characteristics of Problem Drinkers

The literature points to multiple definitions of problem drinking which are briefly summarized below.

1. *Heavy consumption.* Problem drinkers are typically identified as heavy consumers of alcohol. Among college students, this has been defined as weekly drinking in excess of five drinks per occasion. Sex differences have been reported in the consumption rates of male and female drinkers (males typically drinking more in excess than females). Negative consequences are also associated with heavy consumption, but this has varied by gender in some studies.
2. *Frequent intoxication.* Frequent intoxication has been used to define problem drinking and has been reported as an important correlate of other definitions. Intoxication more frequently than once a week or intoxication for the majority of drinking occasions are warning signs. Some studies have reported a higher incidence of frequent intoxication among male problem drinkers.

3. *Self-identified problem drinking.* Willingness to identify oneself as a problem drinker has been associated with the other indicators reported here. It should be noted, however, that only a minority of individuals meeting these other criteria may be willing to acknowledge their own alcohol abuse.
4. *Negative drinking motivations.* While problem drinkers are just as likely to drink for sociability reasons as nonproblem drinkers, they are more likely to drink for purposes of escape or disinhibition. Among reasons, drinking to get drunk is perhaps the best warning sign of problem drinking. Furthermore, men are more likely to drink for escapist reasons than women.
5. *Negative consequences of drinking.* Studies of problem drinkers have reported all or some of the following on a somewhat frequent basis: interpersonal altercations, property damage, negative effects on academic performance, damaged relationships, regretting behavior occurring while drinking, blackouts, and, for men, fights or trouble with authorities. Moderate drinkers normally experience a few of these consequences in the course of a year, but a persistent pattern of multiple or repeated consequences is symptomatic of abuse.
6. *Problem-prone personality.* Characteristics of the problem-prone personality have been associated with problem drinking and include: lowered impulse control, greater proneness to deviant behavior, and lowered expectations of academic success.
7. *Family and peer environments.* Problem drinkers may be integrated into a peer social network in which the above patterns of problem consumption, motivations, and consequences are considered normative. Yet, since peer influences may be, in part, based on misperceptions, counselors should explore the possibility that perceived peer expectations are inaccurate. Furthermore, disruptions in family structure, communication, and intimacy have been correlated with problem alcohol use in high school and college. This is especially true when there is a prior history of alcoholism in the family. The religious background of the student is another factor related to the family that may influence problem drinking.
8. *Later-life problem drinking.* Students who have the potential for more long-term abuse patterns may include those with dominant problem-prone personality features for whom the use of alcohol is a coping mechanism extending across multiple areas of life functioning. This pattern can exist without evidence of excessive consumption or extreme negative consequences.

#### Implications for Counseling and Alcohol Education Programming

From this review, a number of implications may be drawn for health services personnel who counsel indi-

vidual alcohol abusers or conduct alcohol outreach programming and educational activities. The defining characteristics of problem drinkers discussed above may be useful in assessing an individual's potential for alcohol abuse. Yet this review also points to the fact that the concept of problem drinking itself is problematic. There is a lack of consistency among the different definitions currently employed, and most individuals may exhibit only a few of the above-mentioned characteristics. In fact, a recent study of college students employing all of the operational definitions of problem drinking reviewed above demonstrated only a modest empirical overlap between each measure.<sup>43</sup> Thus, there may be different kinds of problem drinkers with different "problems" and backgrounds. This diversity in types of problem drinking should be reflected in instruments developed to assess collegiate alcohol abuse.

For a majority of collegiate problem drinkers, alcohol abuse may represent maladaptive efforts at coping with developmental transitions rather than the beginnings of future alcoholism. For these students, counseling efforts should focus on the current effects of alcohol use and the ways in which they may be inconsistent with immediate and long-term goals. A smaller percentage of individuals who exhibit problem drinking patterns may also be at risk for problem alcohol use later in life. These students, who may exhibit significant alcohol dependence in combination with problem-prone personality characteristics, should especially be encouraged to consider the fact that their drinking can have serious long-range consequences.

The importance of cognitive expectancies regarding the effects of alcohol have often been overlooked. Yet students drink with specific outcomes in mind which may be as important or more influential than pharmacological effects. Many of these outcomes are desired for escapist reasons and suggest a lack of alternative skills for coping with tensions and problems. Thus, a focus on learning positive coping strategies combined with examining the cognitive aspects of drinking behavior may help individuals learn new methods of dealing with stress. The ways in which these expectancies are linked to gender-related socialization patterns should also be considered.

Furthermore, we need to acknowledge and help students think about the impact of peer environments and norms in shaping problem alcohol-use patterns. Indeed, the fact that peer influences may be based on perceived rather than actual behavior has important counseling and educational implications which are discussed elsewhere.<sup>44</sup>

Finally, recognition of distinctive gender patterns and the influential roles of cognitive expectancies and peer influences should be incorporated into counseling and programming activities. The ways in which male and female problem drinkers differ seem to reflect normative gender differences in alcohol use. Thus, these gender differences need to be considered when assessing pro-

blem drinking behavior. While negative consequences more typically experienced by men—such as disruptive behavior or problems with authorities—may be visible and public, women may tend to experience negative effects which are less visible, such as depression and damaged interpersonal relationships.

In conclusion, health practitioners on college campuses can promote early intervention and increase counseling effectiveness by identifying the warning signs and patterns associated with various forms of alcohol abuse among young women and men. But problem drinking needs to be identified and understood in relation to the behavioral, motivational, personality, and gender-related patterns as occurring within the unique social context of college environments.

#### REFERENCES

1. Wright LS. Correlates of reported drinking problems among male and female college students. *J Alc Drug Educ* 1983;28:47-57
2. Kozicki ZA. The measurement of drinking problems among college students at a midwestern university. *J Alc Drug Educ* 1982;27:61-72
3. Blane HT, Hewitt LE. *Alcohol and youth: An analysis of the literature*. National Institute on Alcohol Abuse and Alcoholism. Springfield, U.S. National Technical Information Service, 1977
4. Hughes SP, Dodder RA. Alcohol consumption patterns among college populations. *J Coll Student Pers* 1983;24:257-264
5. Wechsler H, McFadden M. Drinking among college students in New England. *J Stud Alc* 1979;40:969-996
6. Maddox GL (ed.). *The domesticated drug: Drinking among collegians*. New Haven: College and University Press, 1970
7. Straus R, Bacon SD. *Drinking in college*. New Haven, Yale University Press, 1953
8. Berkowitz AD, Perkins HW. *Gender differences in collegiate drinking: Longitudinal trends and development patterns*. Paper presented at the Annual Meeting of the American College Personnel Association, Boston, MA. March 1985
9. Friend KE, Koushki PA. Student substance use: Stability and change across college years. *Int J Addict* 1984;19:571-575
10. Engs RC. Drinking patterns and drinking problems of college students. *J Stud Alc* 1977;38:2144-2156
11. Ratliff KG, Burkhart BR. Sex differences in motivation for and effects of drinking among college students. *J Stud Alc* 1984;45:26-32
12. Room R. Measurement and distribution of drinking patterns and problems in general populations, in *Alcohol-related disabilities*. G Edwards, MM Gross, M Keller, J Moser, R Room (eds.). Geneva: World Health Organization, 1977
13. Blane HT. Middle-aged alcoholics and young drinkers, in *Youth, alcohol and social policy*. HT Blane, ME Chafetz (eds.). New York, Plenum Press, 1979
14. Wechsler H, Rohman M. Extensive users of alcohol among college students. *J Studies Alc* 1981;32:149-155
15. Seay TA, Beck TD. Alcoholism among college students. *J Coll Student Pers* 1984;25:90-92
16. Hill FE, Bugen LA. A survey of drinking behavior among college students. *J Coll Student Pers* 1979;20:236-243
17. Strange CC, Schmidt MR. College student perceptions of alcohol use and differential drinking behavior. *J Coll Student Pers* 1979;20:73-79

18. Selzer ML. The Michigan Alcohol Screening Test: The quest for a new diagnostic instrument. *Am J Psychiatry* 1971; 127:1643-8
19. Kandel DB. Drug and drinking behavior among youth. *Ann Rev Soc* 1980;6:235-285
20. Beck KH. Psychosocial patterns of alcohol abuse in a college population. *J Alc Drug Educ* 1983;28:64-72
21. Gaines LS, Connors GJ. Drinking and personality: Present knowledge and future trends, in *Alcohol and health monograph #1: Alcohol consumption and related problems*. Rockville, MD, National Institute on Alcohol Abuse and Alcoholism, 1982
22. Donovan JE, Jessor R. Adolescent problem drinking: Psychosocial correlates in a national sample study. *J Stud Alc* 1978;39:1506-1524
23. Moos R, Moos B, Kulick J. Behavioral and self-concept antecedents and correlates of college-student drinking patterns. *Int J Addict* 1977;12:603-615
24. Jessor R, Jessor SL. *Problem behavior and psychosocial development: A longitudinal study of youth*. New York, Academic Press, 1977
25. Donovan JE, Jessor R, Jessor SL. Problem drinking in adolescence and young adulthood: A follow-up study. *J Stud Alc* 1983;44:109-137
26. Braucht GN. Problem drinking among adolescents: A review and analysis of psychosocial research, in *Alcohol and health monograph #4: Special population issues*. Rockville, MD, National Institute on Alcohol Abuse and Alcoholism, 1982
27. Levinson PK, Gerstein DR, Maloff DR, (eds.). *Commonalities in substance abuse and habitual behavior*. Lexington, MA, Lexington Books, 1983
28. Beckman LJ. Women alcoholics: A review of social and psychological studies. *J Stud Alc* 1975;36:797-824
29. Reiskin H, Wechsler H. Drinking among college students using a campus mental health center. *J Stud Alc* 1981;42:716-724
30. Knupfer G. Problems associated with drunkenness in women: Some research issues, in *Alcohol and health monograph #4: Special population issues*. Rockville, MD, National Institute on Alcohol Abuse and Alcoholism, 1982
31. Valliant GE, Milofsky ES. The etiology of alcoholism: A prospective viewpoint. *Amer Psychol* 1982;37:494-503
32. Zucker RA, Noll RB. Precursors and developmental influences on drinking and alcoholism: Etiology from a longitudinal perspective, in *Alcohol and health monograph #1: Alcohol consumption and related problems*. Rockville, MD, National Institute on Alcohol Abuse and Alcoholism, 1982
33. Perkins HW. Religious traditions, parents, and peers as determinants of alcohol and drug use among college students. *Rev Religious Res* 1985;27:15-31
34. Perkins HW, Berkowitz AD. Perceiving the community norms of alcohol use among students: Some research implications for campus alcohol education programming. Forthcoming in *Int J Addict* 21
35. Cotton NS. The familial incidence of alcoholism: A review. *J Stud Alc* 1979;40:89-116
36. O'Gorman P. Prevention issues involving children of alcoholics, in *Research Monograph No. 4, Services for Children of Alcoholics*. Washington, DC, National Institute on Alcohol Abuse and Alcoholism, 1981. pp81-100
37. Berkowitz AD, Perkins HW. *Children from alcohol abusing families as college students: Their drinking patterns and problems*. Paper presented at the Annual Meeting of the American College Health Association, Washington, DC, May/June 1985
38. Perkins HW. *Parental religious and problem drinking as intergenerational predictors of problem drinking among college youth*. Paper presented at the Annual Meeting of the Religious Research Association and the Society for the Scientific Study of Religion, Savannah, Georgia, October 1985
39. Skolnich JK. Religious affiliation and drinking behavior. *Q J Stud Alc* 1958;19:452-470
40. Snyder CR. *Alcohol and the Jews—A Cultural Study of Drinking and Sobriety*. Glencoe, Illinois, The Free Press, 1958
41. Ingra A, Moos RH. Alcohol use among college students: Some competing hypotheses. *J Youth Adolesc* 1979;8:393-405
42. Fillmore KM, Bacon SD, Hyman M. *The 27 year longitudinal panel study of drinking by students in college, 1949-1976*. Final report to the National Institute Alcohol Abuse and Alcoholism under Contract No. (ADM)281-76-0015. Berkeley, Calif, Social Research Group, Univ. of California, 1979
43. Perkins HW, Berkowitz AD. *Conceptual and methodological difficulties in defining problem drinking: Research findings from an extensive campus survey*. Paper presented at the annual meeting of the American College Health Association, Washington D.C., May/June 1985
44. Perkins HW, Berkowitz AD. Using student alcohol surveys: Notes on clinical and educational program applications. Forthcoming in *J Alc Drug Educ*